BLOOMFIELD

BLOOMFIELD INDUSTRIES
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OWNERS MANUAL
For
HORIZON By Bloomfield®
COFFEE BREWERS

Model: 0482 Airpot Brewer

Model: 0443 Pour-Over Decanter Brewer

Model: 0412 In-Line Decanter Brewer

Model: 0472 Stepped –Right Decanter Brewer

MODELS:

0412 Decanter (In-Line)

0443 Decanter (In-Line Pour-Over)

0471 Decanter (Step-up Pour Over)

0472 Decanter (Step-Up)

0482 Airpot/Thermal Server

Includes:

Installation
Operation
Use & Care
Servicing Instructions

PRINTED IN CHINA

*p/n **77110** Rev.D ECN-12903*

*M685 **05**0809 cps*

WARRANTY STATEMENT

All electrical equipment manufactured by BLOOMFIELD INDUSTRIES is warranted against defects in materials and workmanship for a period of one year from the date of original installation or eighteen (18) months from the date of shipment from our factory, whichever comes first, and is for the benefit of the original purchaser, except that:

a. airpots carry a 30 day parts warranty only.
b. dispensers; i.e., tea and coffee carry a 90 days parts warranty only, excludes decanters.

THE FOREGOING OBLIGATION IS EXPRESSLY GIVEN IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXCLUDED.

BLOOMFIELD INDUSTRIES DIVISION / SPECIALTY EQUIPMENT MANUFACTURING CORPORATION SHALL NOT BE LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES FROM ANY CAUSE WHATSOEVER.

This warranty is void if it is determined that upon inspection by an Authorized Service Agency that the equipment has been modified, misused, misapplied, improperly installed, or damaged in transit or by fire, flood or act of God.

It also does not apply if the serial nameplate has been removed or unauthorized service personnel perform service. The prices charged by Bloomfield Industries for its products are based upon the limitations in this warranty. Seller's obligation under this warranty is limited to the repair of defects without charge by a Bloomfield Industries Authorized Service Agency or one of its sub-agencies. This service will be provided on customer's premises for non-portable models. Portable models (a device with a cord and plug) must be taken or shipped to the closest Authorized Service Agency, transportation charges prepaid, for services.

In addition to restrictions contained in this warranty, specific limitations are shown below (Additional Warranty Exclusions). Bloomfield Industries Authorized Service Agencies are located in principal cities.

This warranty is valid in the United States and void elsewhere. Please consult your classified telephone directory or your food service equipment dealer; or, for information and other details concerning warranty, write to:

Service Parts Department
Bloomfield Industries
P.O. Box 280
Verdi, NV 89439
Phone: (888) 492-2782 Fax: (888) 492-2783

SERVICE POLICY AND PROCEDURE GUIDE
ADDITIONAL WARRANTY EXCLUSIONS

1. Resetting of safety thermostats, circuit breakers, overload protectors, or fuse replacements unless warranted conditions are the cause.
2. All problems due to operation at voltages other than specified on equipment nameplates; conversion to correct voltage must be the customer's responsibility.
3. All problems due to electrical connections not made in accordance with electrical code requirements and wiring diagrams supplied with the equipment.
4. Replacement of items subject to normal wear, to include such items as knobs and light bulbs. Normal maintenance functions including adjustment of thermostats, microswitches, and replacement of fuses and indicating lights are not covered under warranty.
5. All problems due to inadequate water supply, such as fluctuating, or high or low water pressure.
6. All problems due to mineral/calcium deposits, or contamination from chlorides/chlorines. De-liming is considered a preventative maintenance function and is not covered by warranty.
7. Full use, care and maintenance instructions are supplied with each machine. Those miscellaneous adjustments noted are customer responsibility. Proper attention will prolong the life of the machine.
8. Travel mileage is limited to sixty (60) miles from an authorized Service Agency or one of its sub-agencies.
9. All labor shall be performed during normal working hours. Overtime premium shall be charged to the customer.
10. All genuine Bloomfield replacement parts are warranted for ninety (90) days from date of purchase on non-warranted equipment. **Any use of non-genuine Bloomfield parts completely voids any warranty**.
11. Installation, labor and job check-out are not considered warranty.
12. Charges incurred by delays, waiting time or operating restrictions that hinder the service technicians ability to perform services are not covered by warranty. This includes institutional and correctional facilities.

SHIPPING DAMAGE CLAIMS PROCEDURE

NOTE: For your protection, please note that equipment in this shipment was carefully inspected and packaged by skilled personnel before leaving the factory.
Upon acceptance of this shipment, the transportation company assumes full responsibility for its safe delivery.
IF SHIPMENT ARRIVES DAMAGED:

1. **VISIBLE LOSS OR DAMAGE:** Be certain that any visible loss or damage is noted on the freight bill or express receipt, and that the note of loss or damage is signed by the delivery person.
2. **FILE CLAIM FOR DAMAGE IMMEDIATELY:** Regardless of the extent of the damage.
3. **CONCEALED LOSS OR DAMAGE:** if damage is unnoticed until the merchandise is unpacked, notify the transportation company or carrier immediately, and file "CONCEALED DAMAGE" claim with them. This must be done within fifteen (15) days from the date the delivery was made to you. Be sure to retain the container for inspection.

Bloomfield Industries cannot assume liability for damage or loss incurred in transit. We will, however, at your request, supply you with the necessary documents to support your claim.

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Thank You for purchasing this Bloomfield Industries appliance.

Proper installation, professional operation and consistent maintenance of this appliance will ensure that it gives you the very best performance and a long, economical service life.

This manual contains the information needed to properly install this appliance, and to use, care for and maintain or repair the appliance in a manner which will ensure its optimum performance.

SPECIFICATIONS

MODEL	STYLE	FEATURES	VOLTS	WATTS	AMPS 1ø	POWER SUPPLY CORD
0412	AUTOMATIC DECANTER IN-LINE	3 WARMER FAUCET	120	1800	15.0	NEMA 5-15P
0412CA				1500	12.5	
0443	POUR-OVER DECANTER IN-LINE	2 WARMER	120	1700	14.2	NEMA 5-15P
0443CA				1400	11.6	
0471	POUR-OVER DECANTER STEP-UP	3 WARMER	120	1800	15.0	NEMA 5-15P
0471CA				1500	12.5	
0472	AUTOMATIC DECANTER STEP-UP	3 WARMER FAUCET	120	1800	15.0	NEMA 5-15P
0472CA				1500	12.5	
0482	AUTOMATIC AIRPOT	FAUCET	120	1800	15.0	NEMA 5-15P
0482CA				1500	12.5	

meets Canadian Standards

APPLICABILITY

This manual applies to the following Bloomfield Industries products:
0412
0443
0471
0472
0482

FEATURES AND OPERATING CONTROLS - AUTOMATIC BREWERS

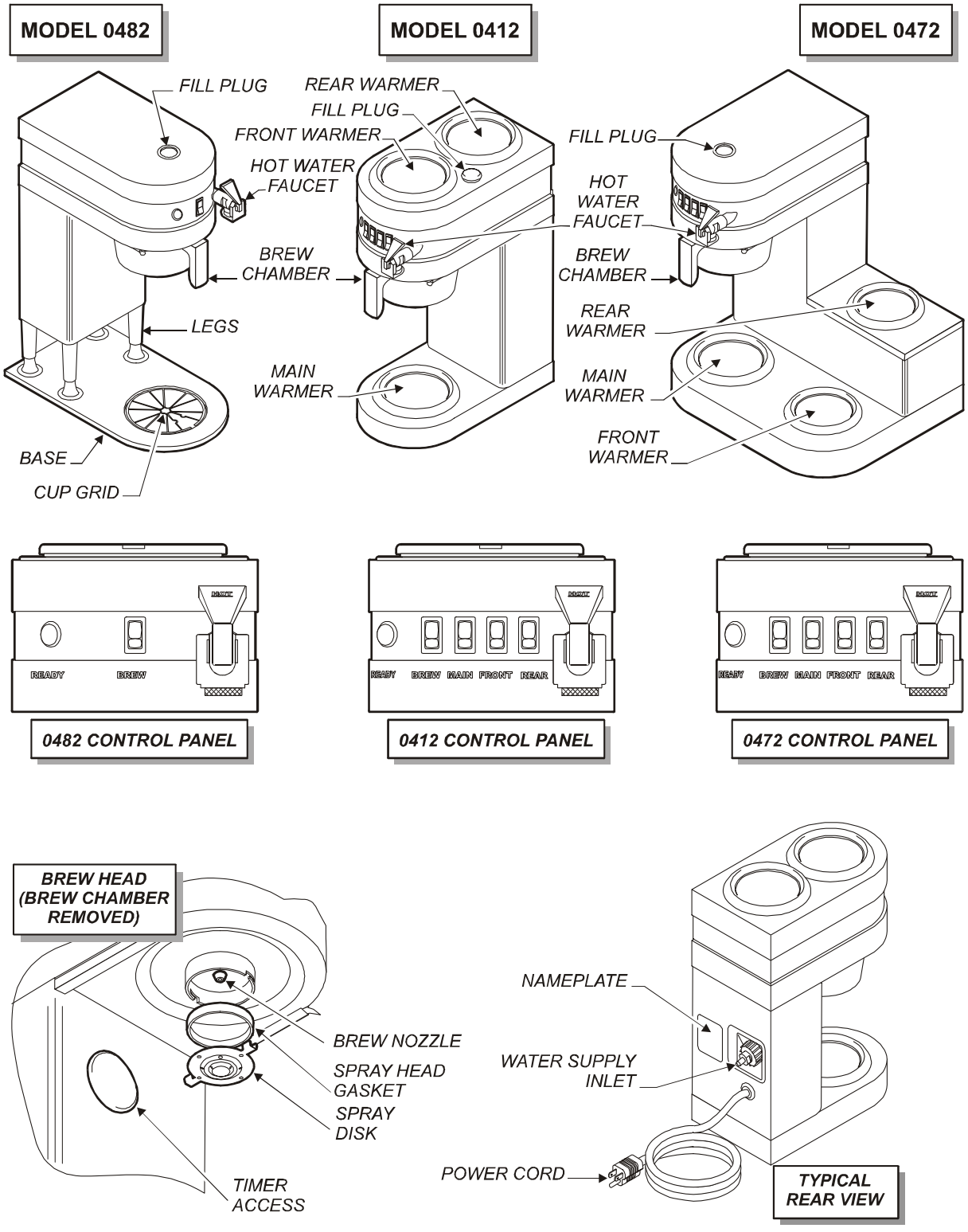


Fig. 1 Features & Operating Controls for Automatic Brewers

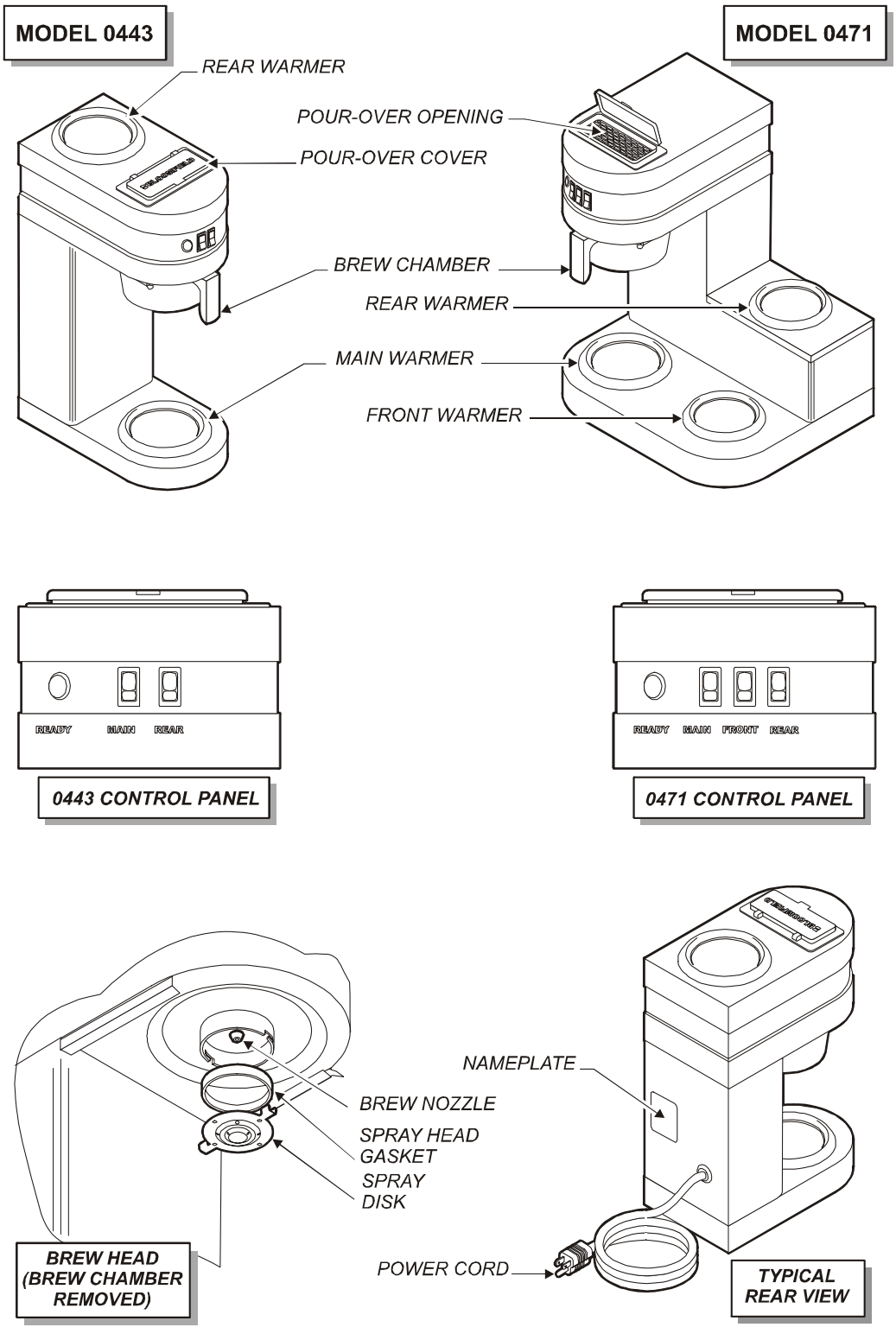


Fig. 2 Features & Operating Controls for Pour-Over Brewers

PRECAUTIONS AND GENERAL INFORMATION

WARNING: ELECTRIC SHOCK HAZARD
All servicing requiring access to non-insulated components must be performed by qualified service personnel. Do not open any access panels which require the use of tools. Failure to heed this warning can result in electrical shock.

WARNING: INJURY HAZARD
All installation procedures must be performed by qualified personnel with full knowledge of all applicable electrical and plumbing codes. Failure could result in property damage and personal injury.

WARNING: ELECTRIC SHOCK HAZARD
Brewer must be properly grounded to prevent possible shock hazard. DO NOT assume a plumbing line will provide such a ground. Electrical shock will cause death or serious Injury.

WARNING: BURN HAZARD
This appliance dispenses very hot liquid. Serious bodily injury from scalding can occur from contact with dispensed liquids.

CAUTION: ELECTRICAL DAMAGE

DO NOT plug in or energize this appliance until all *Installation Instructions* are read and followed. Damage to the Brewer will occur if these instructions are not followed.

CAUTION: BURN HAZARD

Exposed surfaces of the appliance, brew chamber and airpot ,decanter or thermal server may be HOT to the touch, and can cause serious burns.

This appliance is intended for commercial use only.

This appliance is intended for use to brew beverage products for human consumption. No other use is recommended or authorized by the manufacturer or its agents.

This appliance is intended for use in commercial establishments, where all operators are familiar with the appliance use, limitations and associated hazards. Operating instructions and warnings must be read and understood by all operators and users.

The following trouble shooting, component views and parts lists are included for general reference, and are intended for use by qualified service personnel.

This manual should be considered a permanent part of this appliance. The manual must remain with the appliance if it is sold or moved to another location.

AGENCY LISTING INFORMATION

E9253 E9253

STD 4

This brewer is and listed under UL file E9253.

This brewer meets Standard 4 only when installed, operated and maintained in accordance with the enclosed instructions.

READ THIS CAREFULLY BEFORE STARTING THE INSTALLATION

Unpack the unit. Inspect all components for completeness and condition. Ensure that all packing materials have been removed from the unit.

Verify that the Spray Head Gasket and Spray Disk are properly installed.

LEVELING THE UNIT

Verify that an adjustable leg is installed at each corner of the brewer.

NOTE: Various combinations of legs and spacers are available for Model 0482 airpot brewer. The total combination of legs and spacers must be equal for all four corners.

Set Brewer in its operating location. Level the Brewer. A spirit level should be placed on the top of the unit, at the edge, as a guide when making level adjustments.

Level the unit from left to right and front to back by turning the adjustable feet. Be sure all four feet touch the counter to prevent tipping.

IMPORTANT:
To enable the installer to make a quality installation and to minimize installation time, the following suggestions and tests should be done before the actual unit installation is started:

CAUTION:
ELECTRICAL DAMAGE

DO NOT plug in or energize this appliance until all Installation Instructions are read and followed. Damage to the Brewer will occur if these instructions are not followed.

CAUTION:
UNSTABLE EQUIPMENT HAZARD

It is very important for safety and for proper operation that the brewer is level and stable when standing in its final operating position. Provided adjustable, feet or legs must be installed at each corner of the unit. Failure to do so will result in movement of the brewer which can cause personal Injury and/or damage to brewer.

READ THIS CAREFULLY BEFORE STARTING THE INSTALLATION

CAUTION:
ELECTRICAL DAMAGE

DO NOT plug in or energize this appliance until all Installation Instructions are read and followed. Damage to the Brewer will occur if these instructions are not followed.

IMPORTANT:
Tank must be full of water before connecting brewer to electric power. Heating elements will be damaged if allowed to operate without being fully submerged in water. See instructions for filling tank, page 8.
Damage caused by operating the brewer without water in the tank is *NOT COVERED BY WARRANTY*.

NOTE: Water supply inlet line must meet certain minimum criteria to insure successful operation of the brewer. Bloomfield recommends 1/4" copper tubing for installation of less than 12 feet and 3/8" for more than 12 feet from a 1/2" water supply line.

NOTE: This equipment must be installed to comply with applicable federal, state and local plumbing codes and ordinances.

PLUMBER'S INSTALLATION INSTRUCTIONS (AUTOMATIC BREWERS)

Brewer should be connected to a **POTABLE WATER, COLD WATER** line. Flush water line before connecting to Brewer.

DO NOT use a saddle valve with a self-piercing tap for the water line connection. Such a tap can become restricted by waterline debris. For systems that must use a saddle tap, shut off the main water supply and drill a 3/16" (minimum) tap for the saddle connection, in order to insure an ample water supply. Remember to flush the line prior to installing the saddle.

The brewer must be installed on a water line with average pressure between 20 PSI and 90 PSI. If your water pressure exceeds 90 PSI at anytime, a pressure regulator must be installed in the water supply line to limit the pressure to not more than 90 PSI in order to avoid damage to lines and solenoid.

A water shut-off valve should be installed on the incoming water line in a convenient location (Use a low restriction type valve, such as a 1/4-turn ball valve, to avoid loss of water flow thru the valve.

NSF requires that the brewer be able to be moved for cleaning underneath. Loops of copper tubing will satisfy this requirement. See Figure 3 below.

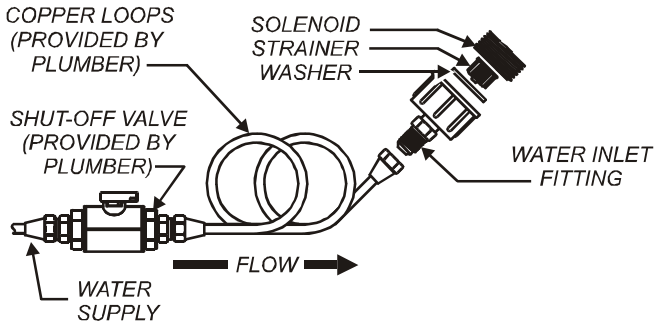


Fig. 3 Water Supply Installation

In some areas, local codes require a backflow preventer (check valve) to be installed on the inlet water line. If a backflow preventer is used, you must install a *water hammer arrester* in the incoming line, between the backflow preventer and the brewer inlet, as far away from the brewer as space will allow. This will relieve the excessive back pressures that can cause faucet leaks and solenoid malfunctions.

ELECTRICIAN'S INSTALLATION INSTRUCTIONS

REFER TO ELECTRICAL SPECIFICATIONS - Page 1
Check the nameplate to determine correct electrical service required for the Brewer to be installed.

IMPORTANT: Before connecting to electricity, make sure automatic brewers are connected to the water supply.

NOTE: Does not apply to 0443 and 0471 pour-over brewers.

All models are equipped with a cord and plug. They require a 115 - 125 volt 20 amp circuit (50/60 Hz, 2 wire plus ground, with NEMA 5-15R or 5-20R Receptacle).

See Figure 4 at right.

WARNING:
SHOCK HAZARD

Brewer must be properly grounded to prevent possible shock hazard. DO NOT assume a plumbing line will provide such a ground. Electrical shock will cause death or serious injury.

IMPORTANT:
Supply power must match nameplate for voltage and phase. Connecting to the wrong voltage will damage the brewer or result in decreased performance. Such damage is not covered by warranty.

IMPORTANT:
Do not connect brewer to electrical power until you have filled the tank. See instructions on page 8.

IMPORTANT:
The ground prong of the plug is part of a system designed to protect you from electrical shock in the event of internal damage. Never cut off the ground prong nor twist a blade to fit an existing receptacle. Contact a licensed electrician to install the proper circuit and receptacle.

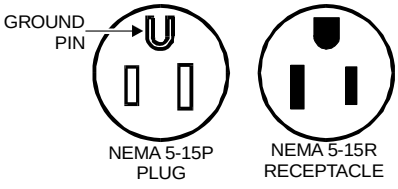


Fig. 4 Power Supply Plug

OPERATION

IMPORTANT:
TANK MUST BE FULL OF WATER BEFORE CONNECTING BREWER TO ELECTRIC POWER.

Heating elements will be damaged if allowed to operate without being fully submerged in water. Damage caused by operating the brewer without water in the tank is *NOT COVERED BY WARRANTY*.

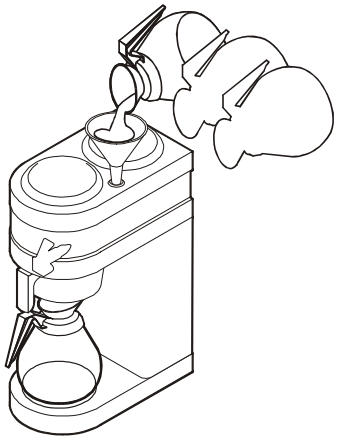


Fig. 5 Fill the Tank (Automatic Units)

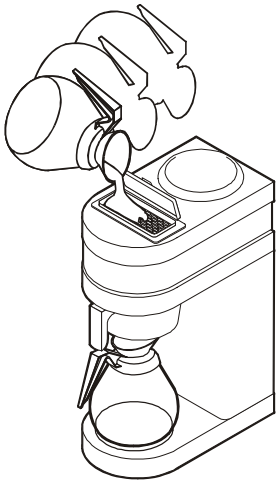


Fig. 6 Fill the Tank (Pour-Over Units)

A. START-UP

For initial start-up, or if the brewer has not been used for an extended period of time:

- Be sure spray disk and brew gasket are properly installed in the brew head.
- Be sure the water supply is properly connected and the water supply valve is turned *ON*.
- Be sure the WATER TANK IS FILLED.

IMPORTANT: Fill the water tank before energizing this brewer.

Automatic Units.
See Figure 5 at left

1. Insert the brew chamber (empty) and place an empty decanter or airpot in place under the brew chamber.
2. Remove the FILL PLUG from the fill hole.
   NOTE: On Model 0412, insert provided funnel in the fill hole.
3. Pour three (3) full decanters of water into the FILL HOLE. When water flows from the brew head, the tank is full.
4. Reinstall FILL PLUG.
5. Connect the unit to electrical power.
6. Unit will begin heating water in preparation for the first brew. When the water has reached the proper temperature, the “READY” light will glow.

Pour-Over Units.
See Figure 6 at left

1. Insert the brew chamber (empty) and place an empty decanter in place under the brew chamber.
2. Open the POUR-OVER COVER.
3. Pour three (3) full decanters of water into POUR-OVER OPENING. When water flows from the brew head, the tank is full.
4. Close the POUR-OVER COVER.
5. Connect the unit to electrical power.
   Unit will begin heating water in preparation for the first brew. When the water has reached the proper temperature, the “READY” light will glow.

A. PREPARATION

Place one (1) genuine Bloomfield paper filter in the brew chamber.
Add a pre-measured amount of fresh coffee grounds.
Gently shake the brew chamber to level the bed of grounds.
Slide the brew chamber into place under the brew head.

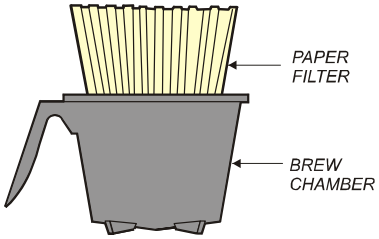


Fig. 7 Brew Chamber

B. AUTOMATIC OPERATION

Be sure "READY" light is lit.

Place the appropriate *EMPTY* decanter or airpot in place under the brew chamber.

Press the "BREW" switch. The solenoid will open for an amount of time determined by the timer setting, admitting a measured quantity of water into the tank.

Inlet water will displace a like amount of heated water from the tank. The hot water will be forced into the brew head where it will spray over the bed of grounds. Freshly brewed coffee will begin to fill the container under the brew chamber. When the flow and all dripping stops, the coffee is ready to serve.

C. POUR-OVER OPERATION

Be sure "READY" light is lit.

Place the appropriate *EMPTY* decanter in place under the brew chamber.

Pour one (1) decanter of tap water into the pour-over opening.
Be sure to close the POUR-OVER COVER.

The added water will displace a like amount of heated water from the tank. The hot water will be forced into the brew head where it will spray over the bed of grounds. Freshly brewed coffee will begin to fill the container under the brew chamber. When the flow and all dripping stops, the coffee is ready to serve.

D. PREPARE FOR NEXT BREW

Discard the contents of the brew chamber and rinse it in a sink.
When the "READY " light glows, the brewer is ready for another brew cycle.

CAUTION:
BURN HAZARD

Exposed surfaces of the brewer, brew chamber, decanter and/or airpot may be HOT to the touch, and can cause serious burns.

CAUTION:
BURN HAZARD

To avoid splashing or overflowing hot liquids, ALWAYS place an empty decanter or airpot under the brew chamber before starting the brew cycle. Failure to comply can cause serious burns.

CAUTION:
BURN HAZARD

After a brew cycle, brew chamber contents are HOT. Remove the brew chamber and dispose of used grounds with care. Failure to comply can cause serious burns.

NOTE: Water for the hot water faucet is heated in a coil inside of the water tank. Use of the faucet will not affect the volume of water delivered for a brew. However, overuse of the faucet during a brew may lower the temperature of the brew water.

CLEANING INSTRUCTIONS

CAUTION:
BURN HAZARD

Brewing and serving temperatures of coffee are extremely hot.
Hot coffee will cause serious skin burns.

CAUTION:
SHOCK HAZARD

Do not submerge or immerse brewer in water.

IMPORTANT:
DO NOT use steel wool, sharp objects, or caustic, abrasive or chlorinated cleansers to clean the brewer, decanters or airpots.

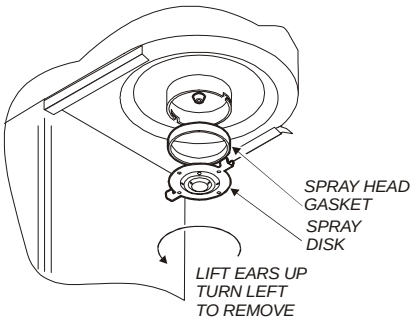


Fig. 8 Cleaning

PROCEDURE: Clean Coffee Brewer

PRECAUTIONS:	Disconnect brewer from electric power. Allow brewer to cool.
FREQUENCY:	Daily
TOOLS:	Mild Detergent, Clean Soft Cloth or Sponge Bristle Brush, Bottle Brush

1. Disconnect brewer from electric power. Allow brewer to cool before cleaning.
2. Remove decanters or airpot.
3. Remove and empty brew chamber.
4. Remove the spray disk from the brew head (See figure 8): Press up on the spray disk ears, then turn the disk to the left to unlatch. Remove the gasket from inside the brew head.
5. Wipe inside of brew head and area around the brew head with a soft clean cloth or sponge moistened with clean water.
6. Wash the spray disk in a sink using warm water and a mild detergent. A bristle brush may be used to clear clogged spray holes. Rinse the spray disk with clean water and allow to air dry.
7. Wash the brew chamber in a sink using warm water and a mild detergent. A bristle brush may be used to clean the inside. Rinse with clean water and allow to air dry.
8. For Model 0782, wash the cup grid and cup grid well. Reinstall cup grid.
9. Wipe the exterior of the brewer with a soft clean cloth or sponge moistened with clean water.
10. Reinstall the gasket *INSIDE* the brew head, then reinstall the spray disk.
11. Reinstall the brew chamber.
12. Clean decanters and airpots by filling with warm soapy water. Scrub the inside with a bottle brush. Empty and rinse with clean water. Wipe the exterior with a soft clean cloth or sponge moistened with clean water. Invert and allow to air dry.
    IMPORTANT: DO NOT submerge airpots in water.

Procedure is complete

TROUBLESHOOTING SUGGESTIONS

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
Water won't heat	Brewer unplugged or circuit breaker tripped	Check power supply cord Check / reset circuit breaker
	Temperature setpoint too low	Set for desired temperature
	Hi-Limit safety switch tripped	Allow to cool hi-limit will self-reset
	Damaged internal component or wiring	Examine wiring & connectors, thermostat and heating element Repair/replace as needed
Coffee level too high or low	Timer out of adjustment	Adjust timer
Brew chamber overflows	Too many filter papers or wrong filter paper	Use one (1) genuine Bloomfield filter per brew
	Brew chamber dispense hole plugged	Thoroughly clean brew chamber
	Too much coffee or too fine a grind	Use correct grind and amount of coffee
Sprays water from brew head	Spray gasket improperly installed	Check/reinstall gasket on INSIDE of brew head
No brew (faucet flows OK)	Spray disk plugged	Clean spray disk
	Damaged internal component or wiring	Check brew switch, timer, controller, solenoid and wiring Repair, replace as needed
No brew plus no flow from hot water faucet	Water supply OFF	Turn water supply ON
	Solenoid inlet strainer plugged	Clean strainer
	Water filter (if used) plugged	Replace filter element
No flow from hot water faucet	Faucet valve turned OFF	Turn faucet valve ON
Poor coffee quality	Keep brewer, decanters and airpots clean. Install a taste and odor filter in water supply, and replace cartridges regularly. Use a quality coffee with a consistent roast. Use proper grind and amount of coffee per brew.	

SERVICING INSTRUCTIONS

CAUTION:
SHOCK HAZARD

Opening access panels or removing warmer plates on this brewer may expose uninsulated electrical components. Disconnect brewer from electrical power before removing any panel

Trouble shooting guides, component views and parts lists are included for general reference, and are intended for use by qualified service personnel..

ACCESS PANELS

WARMER PLATES:

Warmer plates unscrew counter-clockwise.

TOP PANEL:

Remove top panel to access hot water tank, thermostat, heating elements, brew circuit tubing, faucet valve and piping, and top-mounted warmers.

Top panel is held by screws around the edge.

FRONT PANEL:

Remove front panel to access timer.

Models 0412 and 0443:
Front panel and main warmer panel are one piece, and are held by screws around the edge and a retaining lip at the top.

Models 0471 and 0472:
Front panel and main warmer panel are one piece, and are held by screws around the edge and a retaining lip at the top and at the rear warmer plate panel. This panel is secured to the cabinet by the warmer plate.

Model 0482:
The front panel is held by two screws at the bottom and a retaining lip at the top.

SOLENOID DOOR:

Remove solenoid door to access solenoid plumbing connections.

Solenoid door is held by two screws and a retaining lip.

TEMPERATURE ADJUSTMENT

Disconnect brewer from electric power. Remove top panel. Remove button plug from front panel.

Pull vent tube out of tank lid and insert a thermometer of known accuracy in hole. Reconnect brewer to electrical power. Place empty container under brew chamber. Energize brewer and allow unit to heat. When READY light glows, read the temperature displayed on thermometer.

Adjust thermostat by turning shaft; clockwise increases temperature. 1/8 turn = approximately 10ºF.
Refer to Table 1 below for proper brewing temperature based on altitude.

Upon completion, remove thermometer and reinstall the plug.

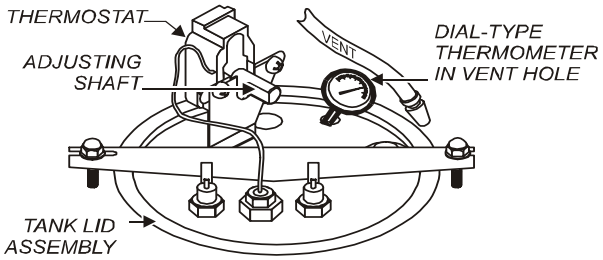


Fig. 9 Checking and Adjusting Brew Temperature

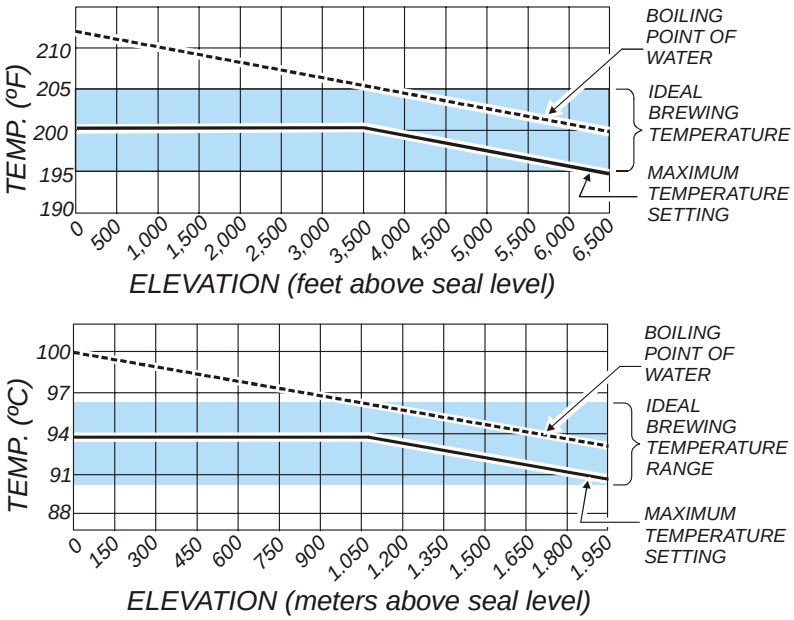


Table 1 Boiling Temperature by Altitude

CAUTION:
SHOCK HAZARD

These procedures involve exposed electrical circuits. These procedures are to be performed by qualified technical personnel only.

NOTE:
Optimum brewing temperature range is 195ºF to 205ºF (90ºC to 96ºC).

IMPORTANT:
A mechanical thermostat will maintain temperature within ±5ºF. To prevent boiling water in the brewer, thermostat should be adjusted to a maximum temperature equal to the local boiling temperature minus 5ºF.

IMPORTANT:
Water pressure must be between 20 p.s.i and 90 p.s.i. flowing pressure. If water pressure exceeds this value, or if water pressure varies greatly, a pressure regulator must be installed in the water supply line.

NOTE: DELAY is the amount of time before a second brew can be initiated, and is factory set for 5 minutes. LOCK and ALARM are not used.

IMPORTANT:
Before setting assembly into tank, make sure tank lid gasket is properly seated on flange of lid. *DO NOT OVER-TIGHTEN*.

IMPORTANT:
When mounting thermostat, be sure to insert sensing bulb to the bottom of the bulb well. Tighten capillary lock nut only enough to ensure no water leakage. Excessive tightening is not necessary.

IMPORTANT:
When replacing heating element, also replace seal gaskets.

TIMER ADJUSTMENT (AUTOMATIC BREWERS ONLY)

The amount of water dispensed automatically during a brew cycle is controlled by the timer.

Place empty decanter (for Model 0482, use an airpot) under brew chamber. Press BREW button. Brewer should dispense one full decanter or airpot of water. To adjust amount:

Remove brew chamber and button plug. Adjust knob on timer; clockwise increases time. Run several cycles to check amount of water delivered. Replace button plug.

REMOVE TANK LID ASSEMBLY

Disconnect brewer from electric power. Turn *OFF* water supply. Remove top panel. Pull vent tube and inlet elbow out of basin pan.

On automatic models, pull water inlet tube out of basin pan. Remove basin pan.

On models with faucet, disconnect inlet pipe at faucet shut-off valve and outlet pipe at faucet.

Disconnect all wiring from thermostat, hi-limit, and heating element.

Loosen two nuts on tank hold-down bracket. Remove hold-down bracket by sliding short slotted end off of locking stud and lifting it off. Remove cover assembly by lifting it straight up.

Reassemble in reverse order.

REPLACE THERMOSTAT (COTHERM)

Disconnect brewer from electric power. Turn *OFF* water supply. Remove top panel.

Disconnect all wiring from thermostat only. Loosen and free jam nut from pass-thru fitting securing temperature sensing bulb. Remove two screws holding thermostat to bracket.

Lift out thermostat, sensing bulb and thermostat gasket.

Reassemble in reverse order. BE SURE the bulb well is fully seated in the tank fitting, and that the temperature sensing bulb is inserted to the very bottom of the bulb well.

REPLACE HEATING ELEMENT

Remove tank lid assembly per above.

Remove two hex nuts holding element to cover. Pull element from mounting holes.

Reassemble in reverse order.

REPLACE SOLENOID

Symptom: Automatic brewer will not flow water; or, automatic brewer drips continuously from brew head.

NOTE: Wrench p/n 86660 is designed to allow easy removal of the hoses from the plastic solenoid valve.

IMPORTANT: Shut-off water and disconnect brewer from electric power before removing hoses or wiring.

Remove top cover and detach solenoid access door from cabinet.

Remove faucet tube from faucet valve at flare fitting.

Remove water supply flare fitting:

a. Slide the 5/8" end of the wrench over the flats on the inlet fitting of the valve.
b. Hold the wrench to prevent the inlet fitting from turning while installing or removing the inlet water supply flare nut.

Remove faucet tube from solenoid:

a. Slide the 7/16" end of the wrench between the valve body and the white ring on the extreme end of the metal hose fitting.
b. Pressure on the white ring toward the metal fitting releases the clinch ring, allowing the tube to be easily slid off of the solenoid bypass outlet.
c. Install tube on new valve by pressing end of tube onto bypass outlet until it is fully seated.

Disconnect wiring.

Remove two screws holding solenoid to access door.

Reassemble in reverse order.

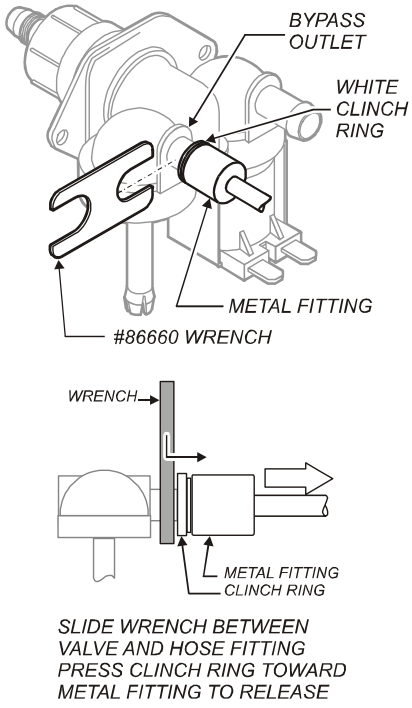

BYPASS OUTLET
WHITE CLINCH RING
METAL FITTING
#86660 WRENCH
WRENCH
METAL FITTING CLINCH RING
SLIDE WRENCH BETWEEN VALVE AND HOSE FITTING PRESS CLINCH RING TOWARD METAL FITTING TO RELEASE

Fig. 10 Remove Faucet Supply from Solenoid

CLEAN SOLENOID SCREEN

Symptom: Automatic brewer will not flow water.

Disconnect brewer from electric power. Turn *OFF* and disconnect water supply from brewer inlet fitting.

Unscrew water inlet fitting from solenoid.

Using needle-nose pliers, withdraw strainer screen from solenoid. Clean screen under faucet. A stiff bristle brush may be used if necessary.

Reinsert screen in solenoid. Be careful to maintain correct orientation. (The *OPEN END* of the screen goes in *FIRST*.)

Reassemble in reverse order.

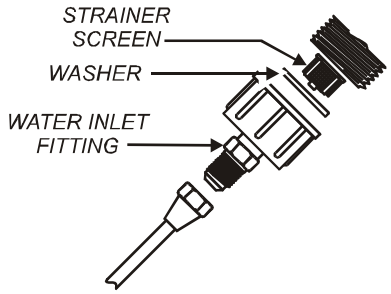


Fig. 11 Clean Strainer Screen

REPLACE TIMER ASSEMBLY

Disconnect brewer from electric power.

Remove front panel. Remove three screws holding timer to bracket. Disconnect wiring to timer.

Reassemble in reverse order.
Adjust timer as described on page 14.

IMPORTANT:
When replacing water faucet coil, also replace seal gaskets.

REPLACE HOT WATER FAUCET COIL

Symptom: Brewer drips continuously from brew head, except when faucet valve is turned OFF.

Remove tank lid assembly per above.

Remove two hex nuts hot water coil to cover. Pull coil from mounting holes.

Reassemble in reverse order.

NOTE: Any abrasion or roughness on the flat end of the seat cup will require replacing the seat cup:

Work the seat cup out of the bonnet and off of the end of the stem.

Install a new seat cup, making sure the knob on the stem is fully inserted into the pocket of the seat cup, and the skirt of the seat cup is fully inserted into the bonnet.

REPAIR HOT WATER FAUCET

Open top panel. Turn faucet valve OFF.

Unscrew aerator cap from faucet and remove handle retaining clip. Do not let faucet body turn.

Pull bonnet assembly from faucet body.

Examine the interior of the faucet body and the surface of the seat cup. Clean out any debris in the faucet body, using a stiff bristle brush if necessary.

Examine the aerator. Clean any debris from the screen or flow straightener, using a stiff bristle brush if necessary.

Reassemble in reverse order.

NOTE: This faucet body is not interchangeable with the faucets in other families of Bloomfield brewers. If the entire faucet is to be changed, use p/n 87123. Internal components may be interchanged, however.

REPLACE BREW READY LIGHT or BREW BUTTON

Unplug power cord or turn circuit breaker OFF. Disconnect electric leads.

Using Switch Removal Tool (p/n 83209) or a thin screwdriver, compress mounting tabs then pry light or switch from mounting hole.

Reassemble in reverse order.

PROCEDURE: Delime the Water Tank

PRECAUTIONS: Disconnect brewer from electric power.
Allow brewer to cool.

FREQUENCY: As required (Brewer slow to heat)

TOOLS: Deliming Solution
Protective Gloves, Goggles & Apron
Mild Detergent, Clean Soft Cloth or Sponge
Bristle Brush, Bottle Brush
Large Sink (or other appropriate work area)

1. Disconnect brewer from electric power. For automatic brewers, turn off the water shut-off valve and disconnect the water supply line from the brewer inlet fitting.
2. Remove the tank lid assembly as described on page 14.
3. Remove the water tank from the brewer body by lifting straight up. Empty all water from the tank. Set the tank back into the brewer.
4. Mix 2 quarts of deliming solution according to the manufacturer's directions. Carefully pour the deliming solution into the water tank. Lower the lid assembly back onto the tank. Allow to sit for 30 minutes, or as directed by the manufacturer.
5. At end of soaking period, remove lid assembly from tank. Thoroughly rinse internal components of lid assembly with clear water. Using a stiff bristle brush, scrub the heating element (and faucet water coil on automatic brewers) to remove lime and calcium build-up. Rinse with clean water. Store lid assembly in a safe location .
6. Remove the tank from the brewer and empty. Using a stiff bristle brush, scrub the interior of the water tank to remove lime and calcium build-up. Rinse with clean water.
7. Set the tank back into the brewer. Reassemble the tank lid to the water tank. Make sure the gasket is properly in place, then reinstall the hold-down strap.
8. Reinstall wiring to heating element and thermostat. Reinstall the hi-limit thermostat (if removed). For automatic brewers, reassemble piping for the faucet. Verify that all internal components are dry, then reinstall the top panel.
10. Reconnect brewer to electrical supply and, for automatic brewers, reconnect water supply.
11. Install the brew chamber without filter paper or grounds. Run at least three full brew cycles and discard all water generated.
12. Brewer is ready to use.

CAUTION:
CHEMICAL BURN HAZARD

Deliming chemicals may be caustic. Wear appropriate protective gloves and goggles during this procedure.
Never siphon deliming chemicals or solutions by mouth.
This operation should only be performed by qualified and experienced service personnel.

IMPORTANT: DO NOT spill, splash or pour water or deliming solution into or over any internal component other than the inside of the water tank.

IMPORTANT: DO NOT allow any internal components to come into contact with the deliming solution. Take care to keep all internal components dry.

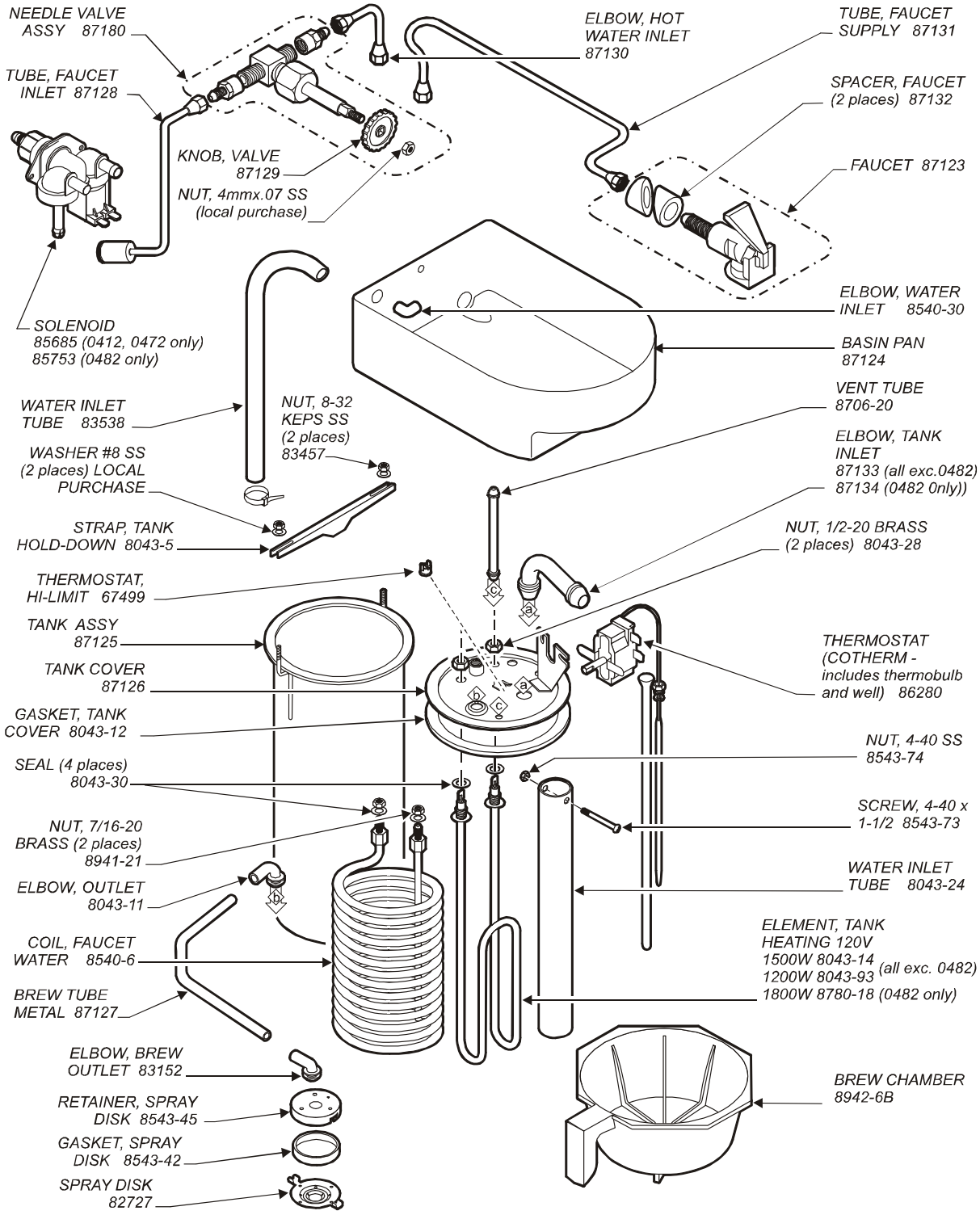
NOTE: Repeat steps 4 thru 5 as required to remove all scale and lime build-up.

NOTE: Normally, silicone hoses do not need to be delimed. Should deliming hoses become necessary, Bloomfield recommends replacing the hoses.

EXPLODED VIEW & PARTS LIST

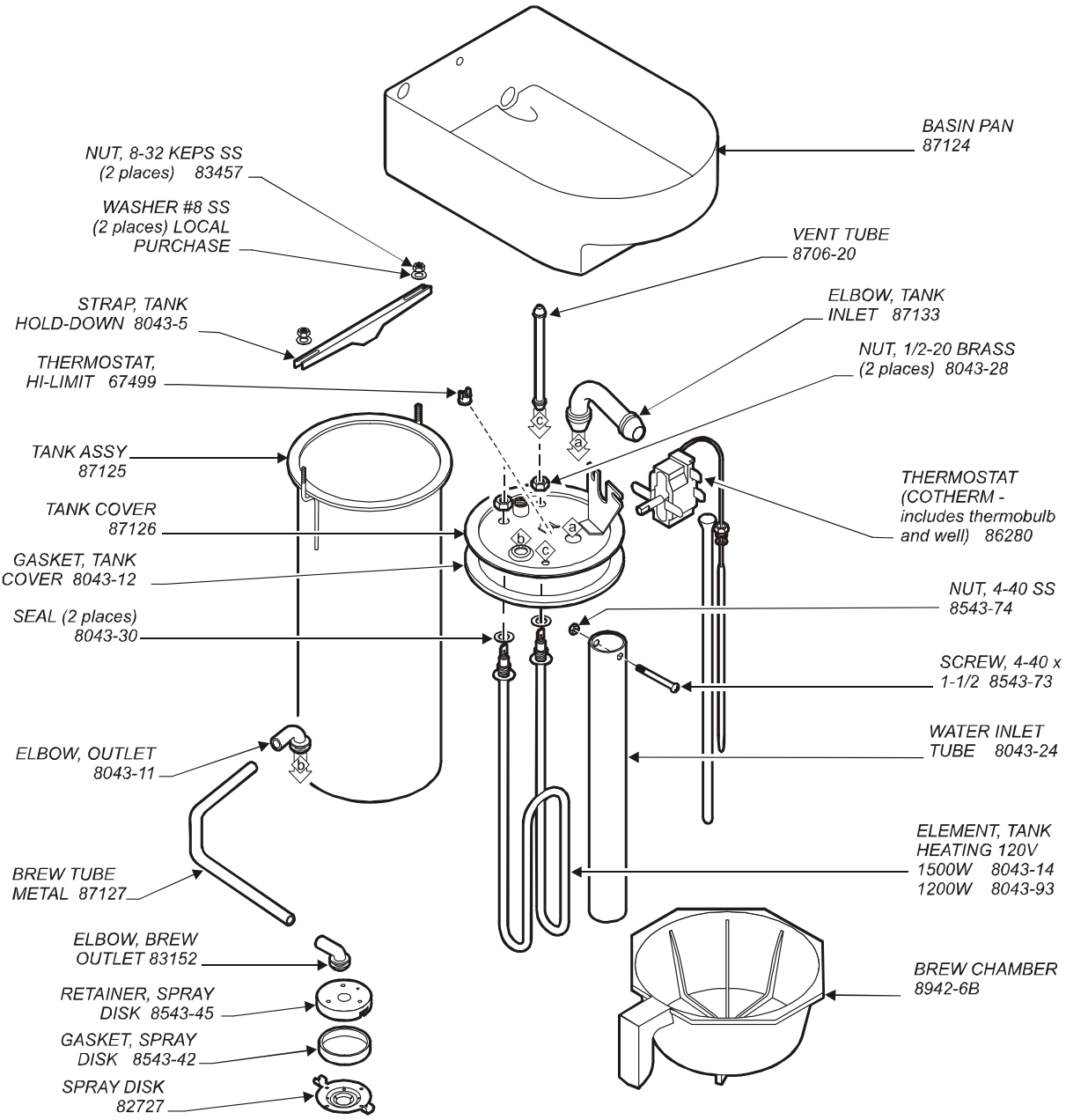
PLUMBING & RELATED COMPONENTS - AUTOMATIC BREWERS

MODELS: 0412, 0472, 0482


NEEDLE VALVE ASSY 87180
TUBE, FAUCET INLET 87128
KNOB, VALVE 87129
NUT, 4mmx.07 SS (local purchase)
SOLENOID 85685 (0412, 0472 only) 85753 (0482 only)
ELBOW, HOT WATER INLET 87130
TUBE, FAUCET SUPPLY 87131
SPACER, FAUCET (2 places) 87132
FAUCET 87123
ELBOW, WATER INLET 8540-30
BASIN PAN 87124
VENT TUBE 8706-20
ELBOW, TANK INLET 87133 (all exc.0482) 87134 (0482 0nly))
NUT, 1/2-20 BRASS (2 places) 8043-28
WATER INLET TUBE 83538
NUT, 8-32 KEPS SS (2 places) 83457
WASHER #8 SS (2 places) LOCAL PURCHASE
STRAP, TANK HOLD-DOWN 8043-5
THERMOSTAT, HI-LIMIT 67499
TANK ASSY 87125
TANK COVER 87126
GASKET, TANK COVER 8043-12
SEAL (4 places) 8043-30
NUT, 7/16-20 BRASS (2 places) 8941-21
ELBOW, OUTLET 8043-11
COIL, FAUCET WATER 8540-6
BREW TUBE METAL 87127
ELBOW, BREW OUTLET 83152
RETAINER, SPRAY DISK 8543-45
GASKET, SPRAY DISK 8543-42
SPRAY DISK 82727
THERMOSTAT (COTHERM - includes thermobulb and well) 86280
NUT, 4-40 SS 8543-74
SCREW, 4-40 x 1-1/2 8543-73
WATER INLET TUBE 8043-24
ELEMENT, TANK HEATING 120V 1500W 8043-14 1200W 8043-93 (all exc. 0482) 1800W 8780-18 (0482 only)
BREW CHAMBER 8942-6B

PLUMBING & RELATED COMPONENTS - POUR-OVER BREWERS

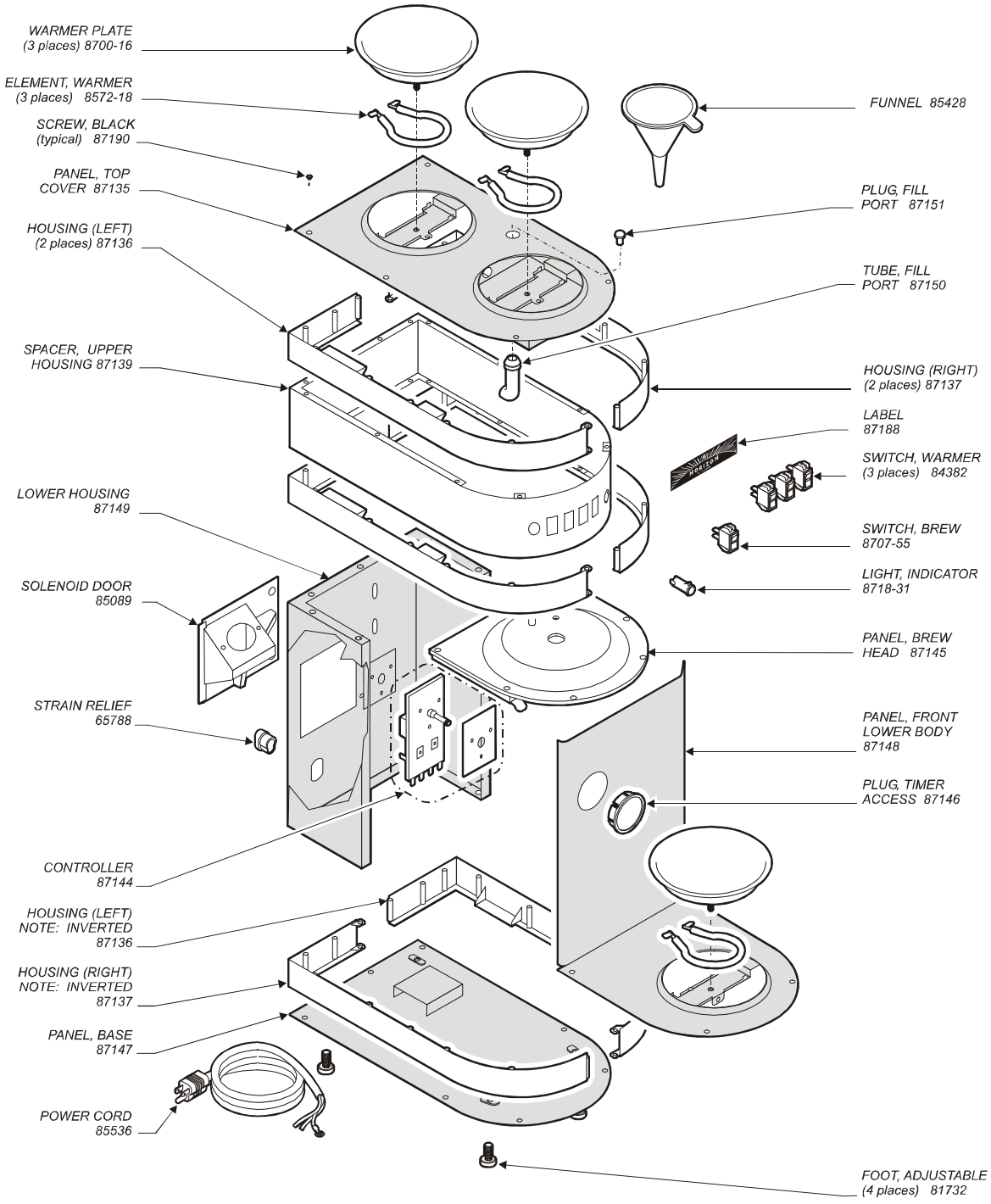
MODELS: 0443, 0471


BASIN PAN 87124
NUT, 8-32 KEPS SS (2 places) 83457
WASHER #8 SS (2 places) LOCAL PURCHASE
VENT TUBE 8706-20
STRAP, TANK HOLD-DOWN 8043-5
ELBOW, TANK INLET 87133
THERMOSTAT, HI-LIMIT 67499
NUT, 1/2-20 BRASS (2 places) 8043-28
TANK ASSY 87125
THERMOSTAT (COTHERM - includes thermobulb and well) 86280
TANK COVER 87126
GASKET, TANK COVER 8043-12
NUT, 4-40 SS 8543-74
SEAL (2 places) 8043-30
SCREW, 4-40 x 1-1/2 8543-73
WATER INLET TUBE 8043-24
ELBOW, OUTLET 8043-11
ELEMENT, TANK HEATING 120V 1500W 8043-14 1200W 8043-93
BREW TUBE METAL 87127
ELBOW, BREW OUTLET 83152
BREW CHAMBER 8942-6B
RETAINER, SPRAY DISK 8543-45
GASKET, SPRAY DISK 8543-42
SPRAY DISK 82727

EXPLODED VIEW & PARTS LIST (continued)

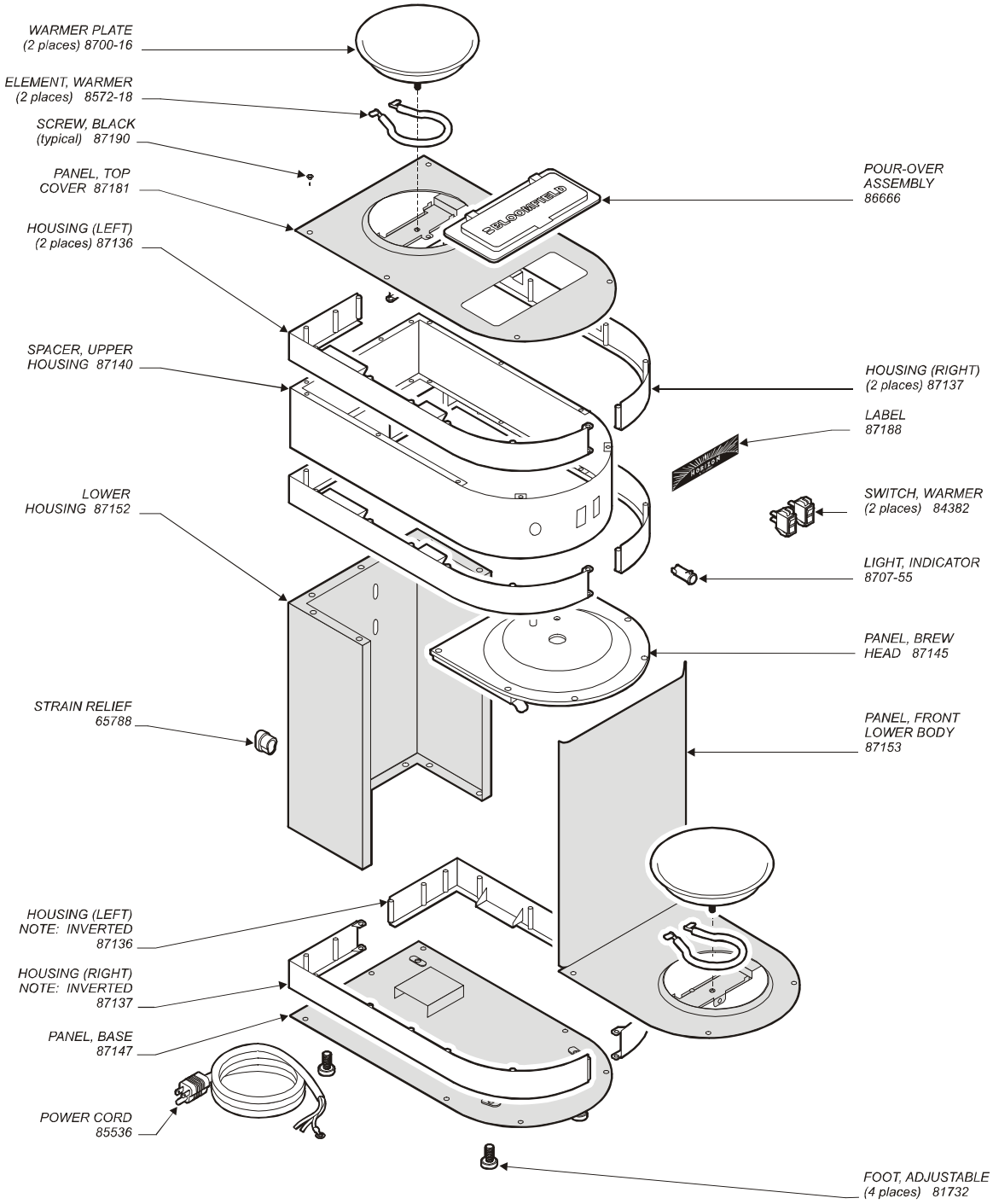
CABINET & ELECTRICAL COMPONENTS - AUTOMATIC IN-LINE DECANTER BREWER

MODEL: 0412



CABINET & ELECTRICAL COMPONENTS - POUR-OVER IN-LINE DECANTER BREWER

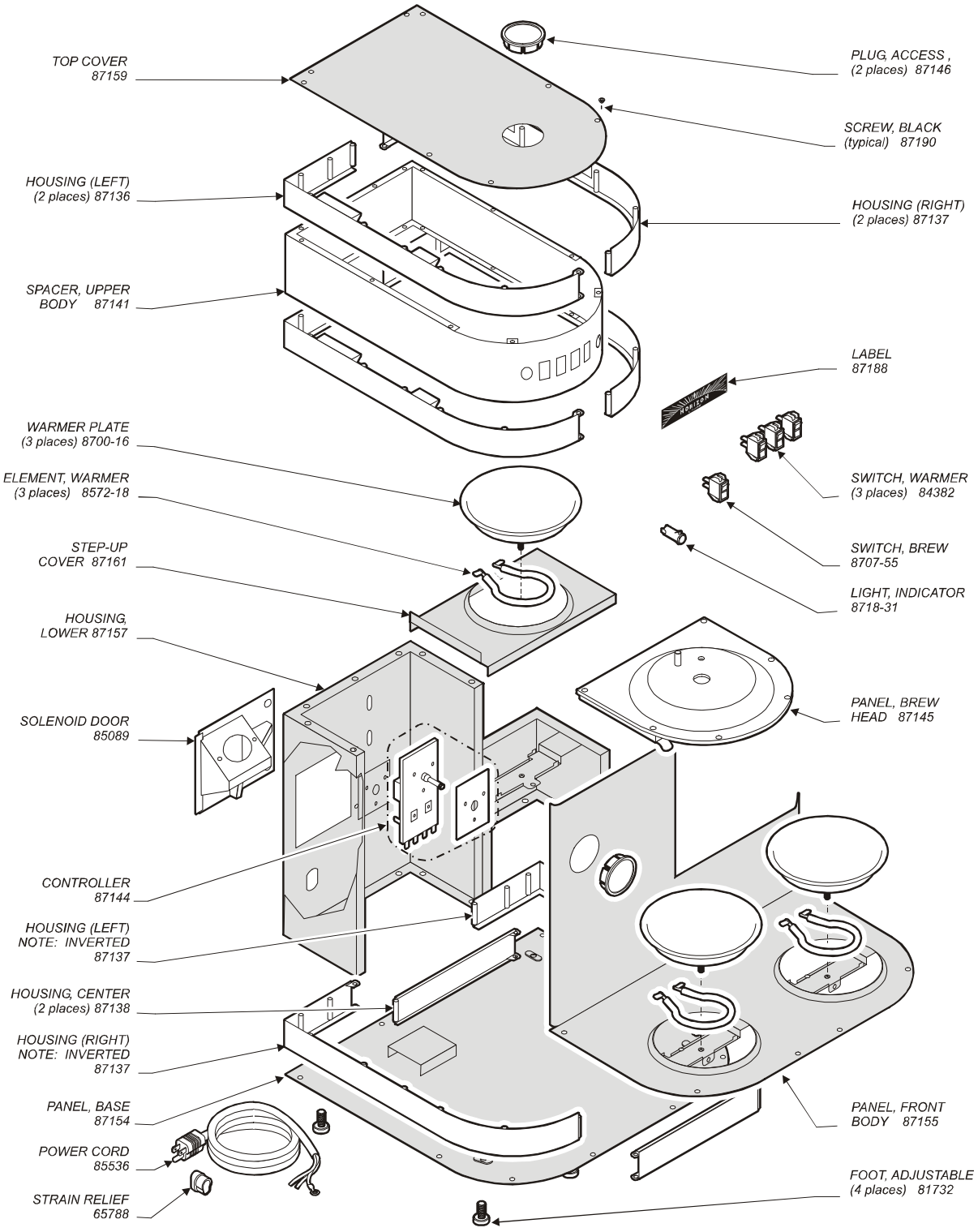
MODEL: 0443



EXPLODED VIEW & PARTS LIST (continued)

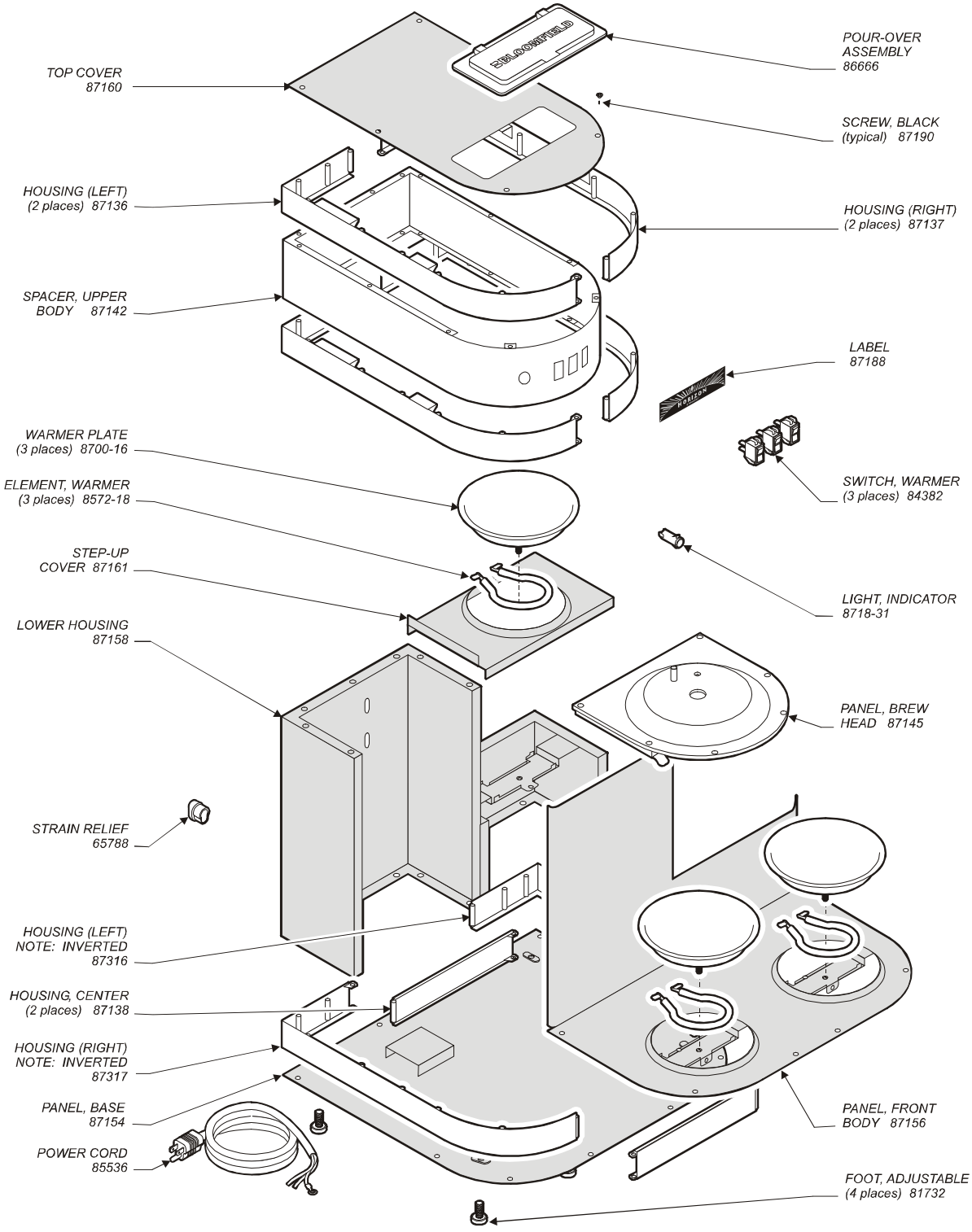
CABINET & ELECTRICAL COMPONENTS - AUTOMATIC STEP-UP DECANTER BREWER

MODEL: 0472



CABINET & ELECTRICAL COMPONENTS - POUR-OVER STEP-UP DECANTER BREWER

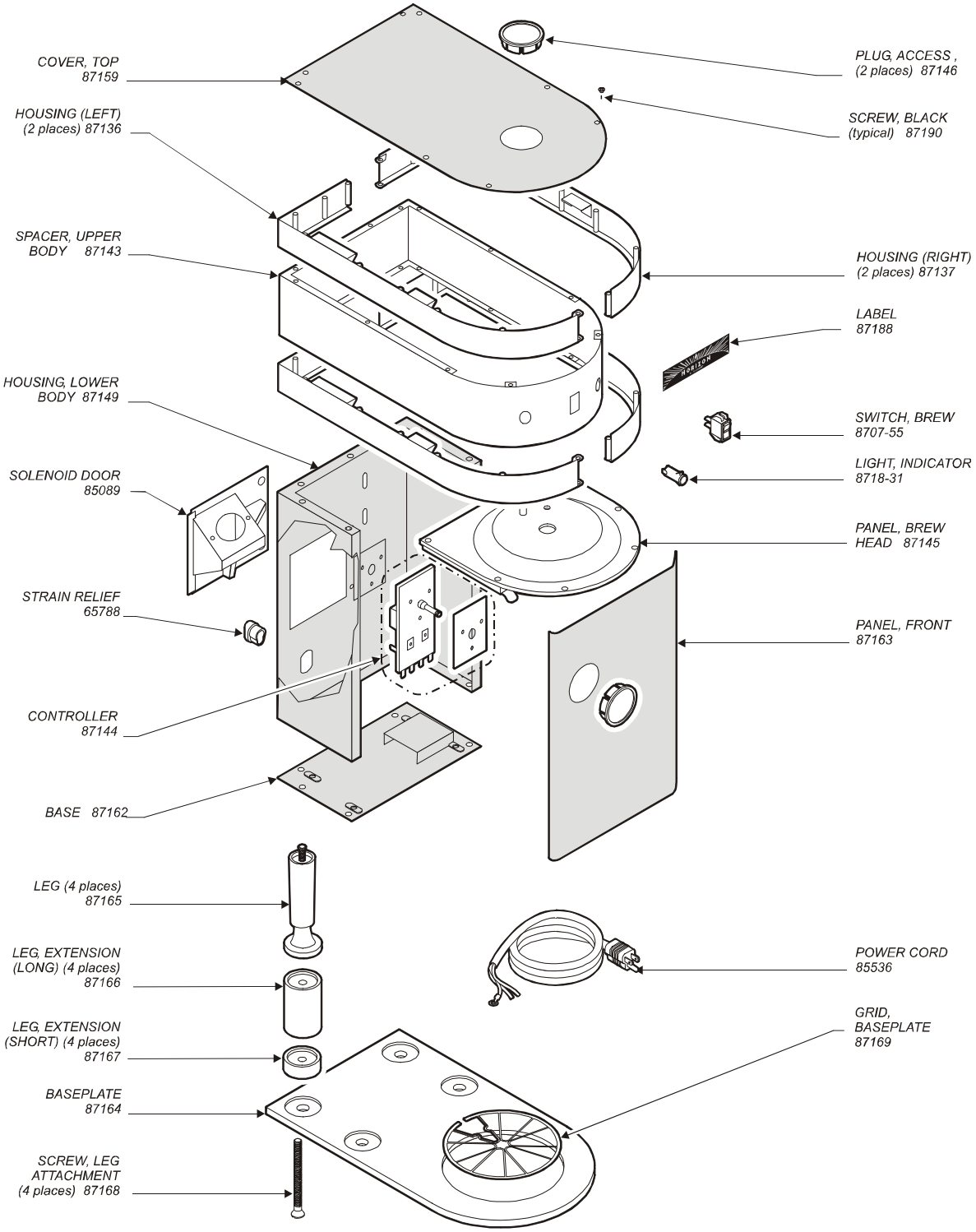
MODEL: 0471

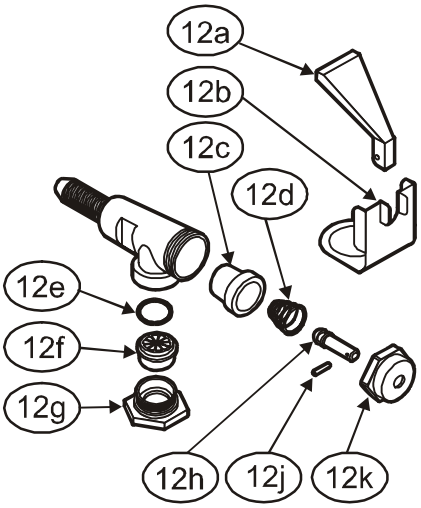

TOP COVER 87160
POUR-OVER ASSEMBLY 86666
SCREW, BLACK (typical) 87190
HOUSING (LEFT) (2 places) 87136
HOUSING (RIGHT) (2 places) 87137
SPACER, UPPER BODY 87142
LABEL 87188
WARMER PLATE (3 places) 8700-16
ELEMENT, WARMER (3 places) 8572-18
SWITCH, WARMER (3 places) 84382
STEP-UP COVER 87161
LIGHT, INDICATOR 8718-31
LOWER HOUSING 87158
PANEL, BREW HEAD 87145
STRAIN RELIEF 65788
HOUSING (LEFT) NOTE: INVERTED 87316
HOUSING, CENTER (2 places) 87138
HOUSING (RIGHT) NOTE: INVERTED 87317
PANEL, BASE 87154
PANEL, FRONT BODY 87156
POWER CORD 85536
FOOT, ADJUSTABLE (4 places) 81732

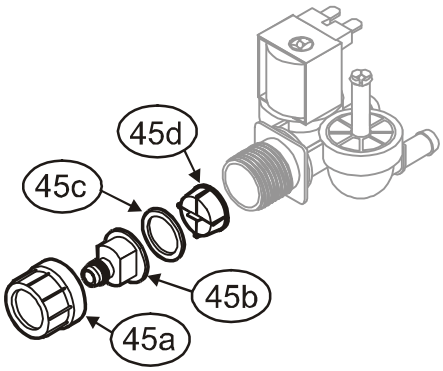
EXPLODED VIEW & PARTS LIST (continued)

CABINET & ELECTRICAL COMPONENTS - AUTOMATIC AIRPOT/THERMAL BREWER

MODEL: 0482







SERVICE KITS

FAUCET REPAIR KITS

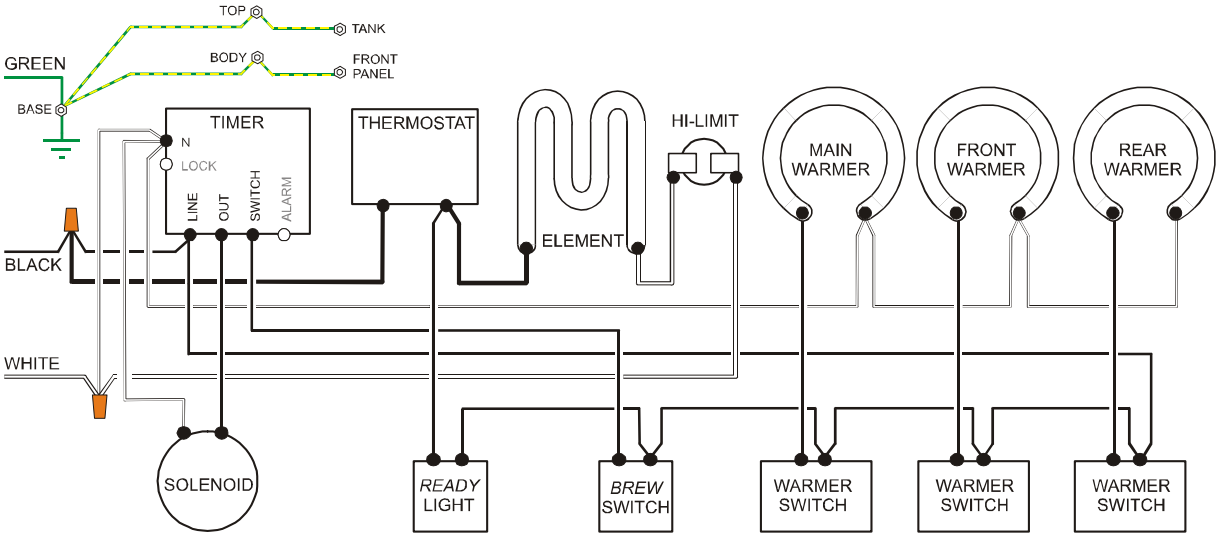
82573	Handle (item 12a)
82575	Seat Cup (item 12c)
82576	Faucet Repair Kit (Includes 12a Handle, 12c Seat Cup, 12d Spring, 12h Stem, 12j Pin & 12k Bonnet
82682	Retainer Clip (item 12b)
84804	Aerator Replacement Kit (Includes 12e O-Ring, 12f Aerator Disk & 12g Aerator Cap
84870	Aerator Repair Kit (Includes 12e O-Ring & 12f Aerator Disk)

SOLENOID REPAIR KITS

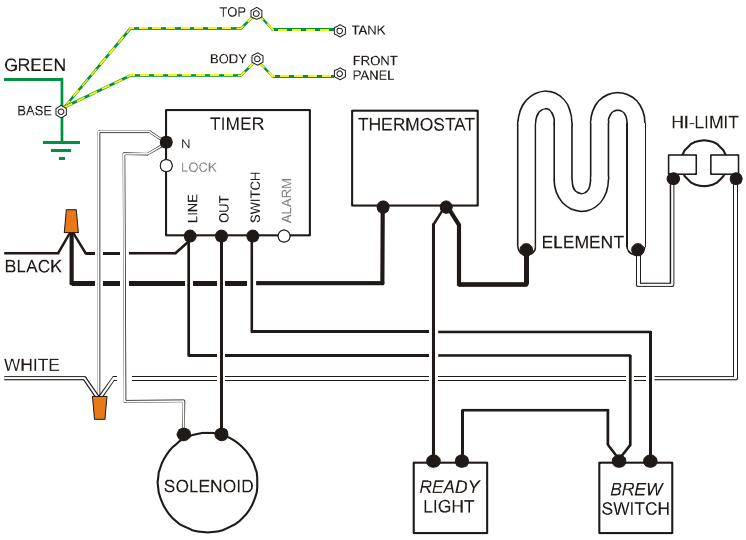
83612	Solenoid Complete, Single
84455	Solenoid, Complete, with Bypass
85218	Inlet Fitting Kit (items 45-10, 45-11, 45-12, 45-13)
85219	Inlet Strainer (item 45-13)

WIRING DIAGRAM

AUTOMATIC BREWERS

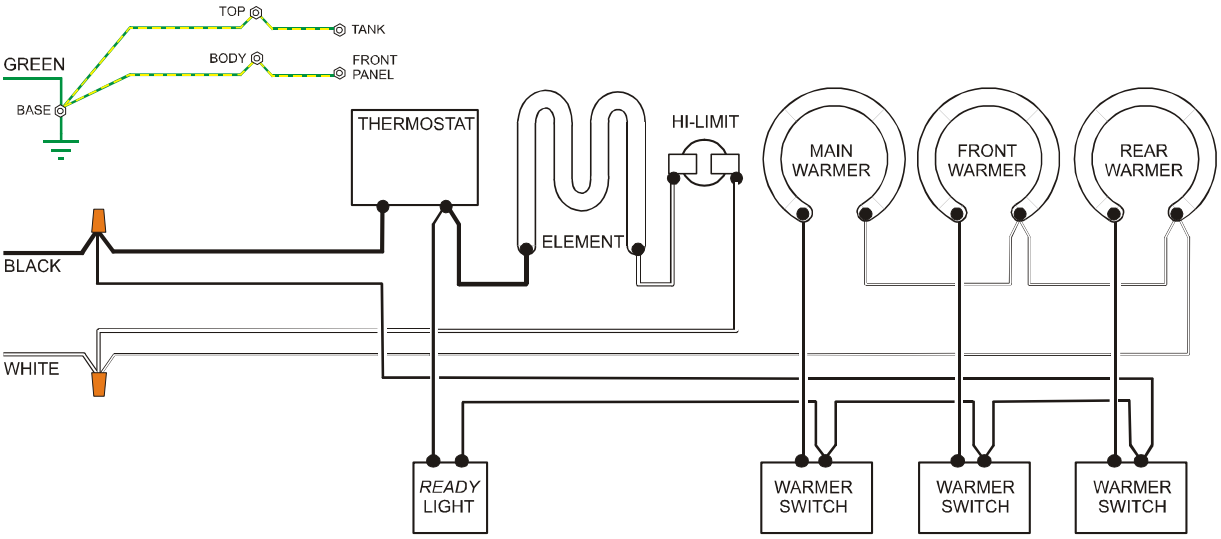


MODELS NUMBER
0412 & 0472



MODEL NUMBER
0482

POUR-OVER BREWERS



MODEL NUMBER
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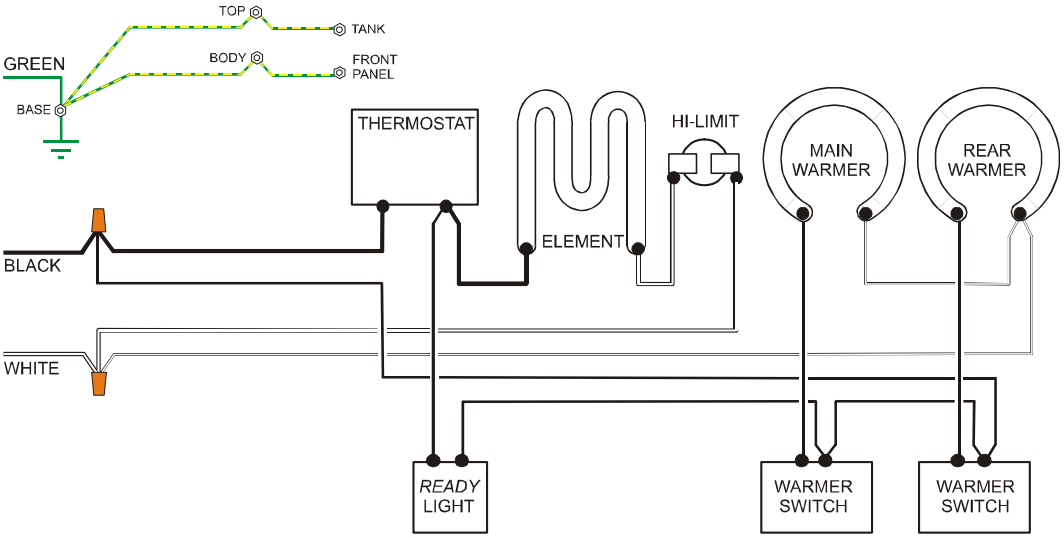

MODEL NUMBER
0471

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Commercial Food Equipment Service Association

SERVICE TRAINING - QUALITY SERVICE

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Division of Carrier Commercial Refrigeration

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